

Author Index of Volume 20

Allen, H. V., 153
Angele, E., 207

Barrett, D. S., 187
Bart, S. F., 97
Bartlett, P. N., 287
Biddle, M. B., 307
Bouwstra, S., 213
Brizzolara, R. A., 199
Brockett, R. W., 91
Brooks, R. A., 187

Chang, S.-C., 143
Chen, L. Y., 123
Chin-Lin Chen, 239
Christenson, T. R., 117
Christesen, S., 277
Clayton, L. D., 171
Collins, S. D., 315
Colton, R. J., 199

de Bruin, D. W., 153
de Rooij, N. F., 293
Docchio, F., 233
Duk-Dong Lee, 301

EerNisse, E. P., 171
Eisenreich, N., 207
Esashi, M., 163

Fan, L.-S., 41
Ferguson, S. G., 249
Flynn, A. M., 187
Frye, G. C., 253
Fujimasa, I., 75
Fujita, H., 33

Guckel, H., 117

Haselton, K. R., 123
Herzog, A., 207
Howe, R. T., 25, 143

Igarashi, I., 135

Jacobsen, S. C., 1, 107
Jaffrezic-Renault, N., 293
Jebens, R., 17, 65
Jenstrom, D. T., 239

Katsurai, M., 33
Kawahata, K., 135
Kelly, T. F., 117
Kemna, P., 213
Kim, Y.-K., 33
Koppelman, G. M., 179
Kordic, S., 225
Kugler, H. P., 207
Kuribayashi, K., 57

Lando, J. B., 307
Lang, J. H., 97
Laschewsky, A., 307
Legtenberg, R., 213
Ling-Chung, S. K., 287

Macdonald, N. C., 123
Maclay, G. J., 277
Martin, S. J., 253
McMillan, J. A., 123
Mohney, S., 117
Muller, R. S., 41, 49
Munter, P. J. A., 225

Nakajima, N., 75
Nakano, A., 163
Newnham, R. E., 269
Nguyen, T.-C. H., 25
Niemczyk, T. M., 253

Ogawa, K., 75

Perrot, H., 293
Pisano, A. P., 83
Price, R. H., 1, 107
Putty, M. W., 143

Rafaelof, M., 1
Ricco, A. J., 253
Rickert, S. E., 307
Robinson, A. L., 143
Runt, J., 269
Ruschau, G. R., 269
Rytting, T. T., 1

Sardini, E., 233
Savage, H. T., 199
Shoji, S., 163
Sinn, F., 207
Smith, B. E., 269
Smith, R. L., 315
Sniegowski, J. J., 117
Spear, W. E., 249
Stetter, J. R., 277
Sugiyama, S., 135

Tabata, O., 135
Tai, Y.-C., 41, 49
Tang, W. C., 25
Taroni, A., 233
Terry, S. C., 153
Thomas, D. C., 123
Trimmer, W. S. N., 17, 65

van den Vlekkert, H. H.,
293

Walker, J., 65
Wan-Young Chung, 301
Ward, R. W., 171
Wells III, W. M., 187
Wiggins, R. B., 171
Wise, K. D., 143
Wood, J. E., 1, 107
Wun-Fogle, M., 199

Yao, J. J., 123

Zhang, Z. L., 123

Subject Index of Volume 20

- Accelerometer systems
 - with self-testable features, 153
- Actuator(s)
 - for aligning optical fibers, micro, 65
 - design overview of eccentric-motion electrostatic micro; Wobble Motor, 1
 - electrostatic micro, modelling considerations for electrostatic forces in, 107
 - millimeter-sized joint, using shape memory alloy, 57
 - miniaturizing Stirling engines for, 75
 - superconducting, using Meissner effect, 33
- Alignment technique
 - wafer-to-wafer, 315
- Anti-collision sensor
 - combined navigation and, for transport robots, 207
- Ceramic/polymer composite
 - chemical sensors, 0–3, 269
- Chemical sensors
 - 0–3 ceramic/polymer composite, 269
- Chemical sensor signals
 - for selective identification, use of time-dependent, 277
- Chemical vapor deposition
 - selective, of W for microelectromechanical structures, 123
- Conducting polymer gas sensors
 - results for four different polymers and five different vapours, 287
- Differential measurement
 - ionic detection using, between ion-sensitive FET and reference FET, 293
- Dimensional analysis
 - system for, of mechanical objects by means of optical filtering, 233
- Dipping method
 - gas-sensing characteristics of SnO_{2-x} thin film with added Pt fabricated by, 301
- Electric fields
 - decrease in Hall angle and sensitivity of Si magnetic sensors at high, 225
- Electroquasistatic induction micromotors
 - analysis of, 97
- Electrostatic forces
 - in electrostatic microactuators, modelling considerations for, 107
- Electromechanical design
 - OYSTER, three-dimensional structural simulator for micro, 179
- Electromechanical structures
 - miniature crystalline quartz, 171
 - selective chemical vapor deposition of W for micro, 123
- Electrostatic microactuator(s)
 - design overview of eccentric-motion; Wobble Motor, 1
 - modelling considerations for electrostatic forces in, 107
- Electrostatic micromotors
 - IC-processed, 41
- Electrostatic motors
 - harmonic, 17
- Electrostatic synchronous micromotors
 - IC-processed, 49
- Fiber optic
 - microbend tactile sensor array, 239
- Gas-sensing characteristics
 - of SnO_{2-x} thin film with added Pt fabricated by dipping method, 301
- Gas sensors
 - conducting polymer; results for four different polymers and five different vapours, 287
- Hall angle
 - decrease in, and sensitivity of Si magnetic sensors at high electric fields, 225
- IC processed
 - electrostatic micromotors, 41
 - electrostatic synchronous micromotors, 49
- Induction micromotors
 - analysis of electroquasistatic, 97
- Intelligence
 - for miniature robots, 187
- Ionic detection
 - using differential measurement between ion-sensitive FET and reference FET, 293
- ISFET
 - ionic detection using differential measurement between, and reference FET, 293
- Langmuir–Blodgett technique
 - use of, to obtain ultra-thin polar films, 307
- Liquid sensors
 - characterization of SH acoustic plate mode, 253
- Load–deflection
 - mechanical property measurements of thin films using, of composite rectangular membranes, 135

- Magnetic sensors
 - decrease in Hall angle and sensitivity of Si, at high electric fields, 225
- Magnetometer
 - tunneling-tip, 199
- Mass flow sensor
 - thermally excited resonating membrane, 213
- Mechanical objects
 - system for dimensional analysis of, by means of optical filtering, 233
- Mechanical property measurements
 - of thin films using load-deflection of composite rectangular membranes, 135
- Meissner effect
 - superconducting actuator using, 33
- Membranes
 - mechanical property measurements of thin films using load-deflection of composite rectangular, 135
- Microactuators
 - for aligning optical fibers, 65
- Microelectromechanical design
 - OYSTER, three-dimensional structural simulator for, 179
- Microelectromechanical structures
 - selective chemical vapor deposition of W for, 123
- Microengines
 - miniaturizing Stirling engines for actuators, 75
- Micromechanical devices
 - fabrication of, from polysilicon films with smooth surfaces, 117
- Micropump
 - normally closed microvalve and micropump fabricated on Si wafer, 163
- Microstructures
 - laterally driven polysilicon resonant, 25
 - process integration for active polysilicon resonant, 143
- Microvalve
 - normally closed, and micropump fabricated on Si wafer, 163
- Motors
 - analysis of electroquasistatic induction micro, 97
 - harmonic electrostatic, 17
 - IC-processed electrostatic micro, 41
 - synchronous micro, 49
 - resonant-structure micro; historical perspective and analysis, 83
- Navigation
 - and anti-collision sensor for transport robots, combined, 207
- Optical fibers
 - microactuators for aligning, 65
- Optical filtering
 - system for dimensional analysis of mechanical objects by means of, 233
- OYSTER
 - three-dimensional structural simulator for micro-electromechanical design, 179
- Platinum
 - gas-sensing characteristics of SnO_{2-x} thin film with added Pt fabricated by dipping method, 301
- Polysilicon films
 - fabrication of micromechanical devices from, with smooth surfaces, 117
- Polysilicon resonant microstructures
 - laterally driven, 25
 - process integration for active, 143
- Process integration
 - for active polysilicon resonant microstructures, 143
- Quartz
 - miniature crystalline, electromechanical structures, 171
- Rectification
 - of vibratory motion, 91
- Resonant microstructures
 - laterally driven polysilicon, 25
 - process integration for active polysilicon, 143
- Resonant-structure micromotors
 - historical perspective and analysis, 83
- Resonating membrane
 - mass flow sensor, thermally excited, 213
- Robots
 - combined navigation and anti-collision sensor for transport, 207
 - intelligence for miniature, 187
- Selective identification
 - use of time-dependent chemical sensor signals for, 277
- Sensitivity
 - of Si magnetic sensors at high electric fields, decrease in Hall angle and, 225
- SH acoustic plate mode liquid sensors
 - characterization of, 253
- Shape memory alloy
 - millimeter-sized joint actuator using, 57
- Silicon
 - magnetic sensors, decrease in Hall angle and sensitivity of, at high electric fields, 225
 - strain gauges, temperature compensation of amorphous, 249
- Silicon wafer
 - normally closed microvalve and micropump fabricated on, 163
- Stirling engines
 - miniaturizing, for actuators, 75
- Strain gauges
 - temperature compensation of amorphous Si, 249

- Superconducting actuator
 - using Meissner effect, 33
- Tactile sensor array
 - fiber optic microbend, 239
- Temperature compensation
 - of amorphous Si strain gauges, 249
- Thin films
 - mechanical property measurements of, using load-deflection of composite rectangular membranes, 135
- Time-dependent chemical sensor signals
 - for selective identification, use of, 277
- Tin
 - gas-sensing characteristics of SnO_{2-x} thin film with added Pt fabricated by dipping method, 301
- Transport robots
 - combined navigation and anti-collision sensor for, 207
- Tungsten
 - selective chemical vapor deposition of, for micro-electromechanical structures, 123
- Tunneling-tip magnetometer, 199
- Ultra-thin polar films
 - use of Langmuir-Blodgett technique to obtain, 307
- Vibratory motion
 - rectification of, 91
- Wafer-to-wafer alignment technique, 307
- Wobble Motor
 - design overview of eccentric-motion electrostatic microactuator, 1



